

CA 66-92  
8 April 1966

United States Government  
Washington, D. C.

Attention: Contracting Officer

Subject:   
Monthly Progress Report

Gentlemen:

Pursuant to a telephoned request from your Technical Representative, we are duplicating our thirty-first monthly progress report by enclosing one reproducible and two copies of it. Also a third copy is enclosed for your Technical Representative.

Very truly yours,

Contracts Administrator

OMS:ks

Enclosures

cc: Technical Representative w/enclosure

Declassification Review by NGA

## THIRTY-FIRST MONTHLY PROGRESS REPORT

### MODEL 933 PHASOLVER SYSTEM

3 MARCH 1966

#### 1. Summary:

- 1.1 During testing, the linear phasolver driver pattern was found to have deteriorated considerably due to scratches and pattern flaking. Most of February was spent repairing the pattern. Over 500 cuts or flakes were touched up. This damage had apparently occurred during the testing portion prior to the work stoppage in June, 1965. The scratches were caused by dust particles between the plates as they moved on each other. (This dust had also caused galling of the support feet as has been reported (Twenty-second Monthly Progress Report, 13 June 1965). The pattern flaking is caused by poor vacuum deposition practices. This is not a problem with our regular vendor.

We are repeating the Co/Cv tests to determine if the pattern has been repaired sufficiently well to continue testing.

- 1.2 The coarse channel electronics has been fabricated and is in checkout.

#### 2. Work Planned for Next Report Period

- 2.1 Resume accuracy testing.
- 2.2 Complete the coarse encoder holding fixture.
- 2.3 Design the humidity test fixture.

STAT

Approved For Release 2006/03/16 : CIA-RDP78B04770A001800010054-4

Approved For Release 2006/03/16 : CIA-RDP78B04770A001800010054-4

## THIRTIETH MONTHLY PROGRESS REPORT

### MODEL 933 PHASOLVER SYSTEM

8 FEBRUARY 1966

#### 1. Summary

The following items were accomplished during this report period:

- 1.1. The logical design to incorporate a coarse channel has been completed and all parts have been ordered. The fabrication of the electronic portion is underway.
- 1.2. The special gage block holders have been received and appear to be satisfactory. System accuracy testing has begun.

#### 2. Work Planned During Next Report Period

- 2.1. Complete the coarse channel electronics.
- 2.2. Continue the system accuracy testing.
- 2.3. Design the humidity test fixture.

## TWENTY-NINTH MONTHLY PROGRESS REPORT

### MODEL 933 PHASOLVER SYSTEM

1 January 1966

#### 1. Summary

The following items were accomplished during this report period.

- 1.1 The test fixture has been realigned and the guage blocks have been recalibrated in preparation for the accuracy testing.
- 1.2 Special holders for aligning the guage blocks in the test fixture have been designed and ordered. These holders are designed to reduce the handling time of the guage blocks and should improve the repeatability and accuracy of the test fixture.
- 1.3 The design for incorporating the coarse channel has started.

#### 2. Work Planned During the Next Report Period.

- 2.1 Commence system accuracy tests on the test fixture.
- 2.2 Complete the coarse channel design and fabricate the coarse channel electronics.
- 2.3 Design the humidity test fixture.

TWENTY-EIGHT MONTHLY PROGRESS REPORT

MODEL 933 PHASOLVER SYSTEM

1 DECEMBER 1965

Linear Phasolver

Contract Amendment No. 6, providing funds to complete the original scope of work and adding two additional tasks, was executed and returned by [REDACTED] 12 November 1965.

The balance of the reporting period was spent

1. Reviewing the past performance test data.
2. Re-establishing the test program to be completed.
3. Modification of test fixture to obtain more repeatable data.

TWENTY-SEVENTH MONTHLY PROGRESS REPORT

MODEL 933 PHASOLVER SYSTEM

1 NOVEMBER 1965

Linear Phasolver

No work was performed on this Contract during the month of October due to the lack of funds.

An additional scope of work and a small overrun was negotiated. However, the formal Contract Amendment has not been received.

TWENTY-SIXTH MONTHLY PROGRESS REPORT

MODEL 933 PHASOLVER SYSTEM

1 OCTOBER 1965

Linear Phasolver

No work was performed on this Contract during the month of September due to the lack of funds.



TWENTY-FIFTH MONTHLY PROGRESS REPORT

MODEL 933 PHASOLVER SYSTEM

3 SEPTEMBER 1965

Linear Phasolver

Work stopped on this Program June 16, 1965 due to a lack of funds.

Estimated cost to complete present scope of work was submitted by letter CA 65-69 on 19 June 1965. This estimate totaled

STAT

Under date of 2 July 1965, by letter CA 65-73, a proposal for completing the present scope of work, modifying the present Phase II Phasolver Test Model to incorporate a coarse channel and to study the effects of humidity on system performance was submitted.

The additional funds required are

1. Complete present scope
2. Add Coarse Channel
3. Conduct Humidity Tests

STAT

Estimated Costs

Increase Fee for Tasks 2 and 3

Total Estimated Funds

No further work is being performed on this Program until additional funds are received.

TWENTY-THIRD MONTHLY PROGRESS REPORT

Model 933 Phasolver System  
13 July 1965

1. Introduction

This is the twenty-third monthly progress report describing the accomplishments during the first half of the report period. Due to funding difficulties, all effort stopped during the latter half of this period.

2. Survey of Accomplishments

2.1 Balance accuracy at 0.0027" gap was obtained on Pattern III, only. This measurement was necessitated by the change in gap reported in the previous monthly progress report.

3. Results of Testing

3.1 Balance accuracy - an absolute accuracy of  $\pm 0.9$  microns was obtained within a single pole pair, as was predicted in the previous report.